



Degrees go to 800 at Fall Convocation

UVic's fall convocation will be held Nov. 28 in the Auditorium of the University Centre. This year, Chancellor the Hon. Dr. Robert G. Rogers will confer approximately 800 undergraduate and graduate degrees, and four honorary degrees.

In the morning ceremony beginning at 10:00 a.m., Heidi von Born and Robert A. Côté will receive honorary degrees. Graduate and undergraduate degrees will be conferred by the Faculties of Graduate Studies, Arts & Science, and Human and Social Development.

In the afternoon ceremony, beginning at 2:00 p.m., Walter Laing MacDonald Perry and John Peter Lee Roberts will receive honorary degrees. The Faculties of Graduate Studies, Education, Engineering, Fine Arts and Law will confer graduate and undergraduate degrees.

Profiles of the honorary degree recipients are on page 4 of The Ring.



Don Pierce photo

Games consultant predicts exciting time for UVic

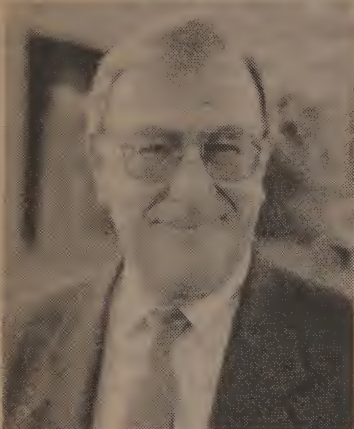
With 21 months until the official opening of the 1994 Victoria Commonwealth Games, UVic has hired a part-time consultant who held one of the top jobs at the University of Calgary during the Calgary Winter Olympics.

Brian Tinker, who was Vice-president Finance and Services at U of C during the 1988 Winter Olympics, will act as the UVic's official liaison representative in matters relating to the upcoming Commonwealth Games.

In 1991, Tinker retired from the U of C and moved to Victoria.

"When (Vice-President Administration) Trevor Matthews asked me if I'd like to help out UVic in this way, I didn't hesitate," says Tinker in his new office in Sedgewick room C119, where he spends most Wednesday afternoons and Thursdays. "I

projects built at the U of C—it was the boost to the collective spirit brought about by the Olympics. "It really enlarged the scope of the University's thinking about what is possible," he said. "It also helped the University and the community come together in a big way."



Ken Faris photo

Tinker

enjoyed the experience at Calgary so much that I am looking forward to my involvement with UVic."

Tinker will advise members of UVic's various committees and task forces that have been established to deal with all aspects of the Games and the University. He has been negotiating with Jim Reed, Vice-President of Partner Relations and Facilities for the Victoria Commonwealth Games Society (VCGS), to draft a master agreement between UVic and the VCGS.

"My goal in the next six weeks is to have a fair understanding of which UVic facilities the VCGS will need for the Games and the dates they will be needed," says Tinker, who is also the VCGS volunteer Chair of the Centennial Stadium Construction Committee. "Once we pin those down the University can start to plan around them."

Tinker says that if UVic's experience is anything like Calgary's, there will be some frustrations leading up to the Games, but he predicts that the next two years will be an exciting time for the University.

"It's fairly normal at this stage to still have a lot of uncertainty and apprehension about such a mammoth event, and this was certainly the case at Calgary," he says, "but things will start to happen very quickly once we know what facilities the VCGS will need and when.

"Everyone at the University of Calgary was pretty proud to be part of such a spectacular event. Any inconveniences sort of disappeared—they were fairly minor anyway compared to all of the good that came out of hosting the Olympics."

He added that the biggest legacy of the Calgary Olympics was not the capital



Work on the Family Student Housing site is proceeding rapidly, as shown by this aerial photograph taken recently by Victoria Commonwealth Games Society photographer Ted Grant. The photograph shows the beginnings of the two apartment-style buildings being constructed on the site and the access road connected to Finnerty Road at the top of the picture. Four more townhouse-style complexes will also be built at the site, which will become part of the Athletes' Village for the 1994 Victoria Commonwealth Games. Altogether the housing project will add another 181 units to UVic's student residences. A new Day Care Centre is being built adjacent to the housing site.



And the winner is...! Robin Cameron, manager of Dunsmuir Lodge, lingers in the moment of suspense as he draws the name of the big winner of an evening at Dunsmuir from the box held by United Way entertainment co-ordinator, Donald Cameron, on Nov. 20.

United Way nears its goal

The UVic United Way campaign has almost reached its 1992 objective. Over \$58,495 has been collected or pledged. This represents 94 per cent of the \$62,000 goal. The Prize Draws have all been completed with over 40 campus donated services and gifts finding their way to lucky participants. The Grand Prize Super Saturday Night at Dunsmuir Lodge was awarded to Betty Christensen in the School Experiences Office of the Faculty of Education. The winners of the Grand Prizes include: Harold Foster, School Experiences Office/Education—the carved wild fowl decoy; Trudy Martin, Bookstore—darkroom development session; Rosalie Heater, Earth & Ocean Science—Distance Education Package; Murray Edwards, off campus—Family motto, hand-crafted in Latin; Caroline Monahan, Hispanic & Italian Studies—one dozen baguettes; Emily Preston, Library Public

Service—\$25 gift certificate to Bookstore; Lilian Muzychka, Bookstore—one gallon of honey; Juliana Saxton, Theatre—lunch for two at Dunsmuir Lodge; Mary Anne Gotaas, Accounting Services—tickets for ferry to Salt Spring Island; Chi-Shiang Wu, Physics & Astronomy—tuition for one at the 1993 Mini University Summer Camp; Thomas Brewis, Economics—University Crest Sweatshirt; Joan Backus, School of Music—University of Victoria Extension Gift Certificate for \$50; Winona Pugh, Athletics & Recreational Services—Wang Automated Calculator (circa 1958).

It may be too late for a prize now, but it is not too late to assist the 39 agencies who depend on the United Way Campaign. Your cheque or pledge can assist agencies like *AIDS Vancouver Island, Community Options for Children & Families, St. John Ambulance, Big Brothers & Big Sisters*, and many more that help the community. "The campaign is still on. We are still looking for donations and certainly hope to reach the target," reports campaign co-ordinator David Glen.

If you have not sent your contribution this year, it is not too late. Call the United Way Co-ordinator at 721-7039 for pledge forms and receipt information.

Quote

"The man who listens to reason is lost. Reason enslaves all whose minds are not strong enough to master her."

— George Bernard Shaw (1856-1950)

Maxims for Revolutionists (by 'John Tanner'): Reason

Sexual harassment tackled at national conference

BY TANIA STRECHENIUK

The effort to eliminate sexual harassment in post-secondary institutions and the workplace received a boost Nov. 11-14 as the largest conference on sexual harassment in Canada brought 225 people to the Victoria Conference Centre to enrich their knowledge of sexual harassment and share information and strategies to combat it.

UVic was the host of the eighth annual conference of the Canadian Association Against Sexual Harassment in Higher Education (CAASHE), and CAASHE President Professor Barbara Whittington (Social Work) was the conference chair.

The conference was especially beneficial because of the range of people who were brought together to discuss sexual harassment, says Whittington. Human resource specialists, union representatives, post-secondary representatives including students, and a large number of government workers participated.

Addressing the emotional, financial, and personal costs of sexual harassment was a key aspect of the conference which was entitled "Sexual Harassment: A Costly Proposition." A number of issues were raised including the link between racism, sexism and homophobia, making punishment fit the crime, and the role of unions in dealing with sexual harassment.

Workshops, led by Canadian and American advisors from colleges, universities, unions and government, offered advice on developing policies and procedures, handling sexual harassment complaints, developing skills for mediators, and preparing witnesses for sexual harassment cases. One workshop addressed what men can do to help create a harassment-free work and study environment.

Sheila Devine, Director of Equity Issues, Assistant to the President, and a member of the organizing committee for the conference, found the conference to be an excellent opportunity for those working in the field to update information, exchange ideas, and gain support. She explains that those working to combat sexual harassment often feel isolated. Not only is there potential for an advisor to make enemies, but because of the confidential nature of sexual harassment complaints, an advisor may not have anyone with whom to talk. Devine also points out that these types of jobs have very high turnover rates. A key component of job satisfaction and retention, she remarked, is visible support from senior officers within institutions.

The personal and professional costs of such work were clearly evident in a panel session called "If We Knew Then What We Know Now: The Personal and Political Costs of Making

Change," and in a presentation entitled "Evaluating the Risk and Assessing the Impact: Lessons from the Murders at Concordia."

Whittington was pleased to see UVic so well represented by the workshop presenters, students, volunteers, union personnel, and Human Resources staff. She was surprised, however, that UVic faculty and senior administrators did not attend the conference. "Many universities and colleges take advantage of the CAASHE annual conference as an opportunity for faculty and staff training and education," she points out.

UVic contributors included Cheryl Crane (Assistant Professor, Law) who gave an overview of recent developments in the law relating to sexual harassment; Assistant Professors Hester Lessard and Lisa Philipps (Law) and sociology MA candidate Carrie Bronson, who led a roundtable workshop on sexual harassment in professional and graduate schools; Bonny Austin and Sally Kimpson, graduate students in counselling psychology, who held a workshop on community responses to sexual harassment; and John McLaren, Lansdowne Professor of Law, and Associate Professor Jamie Cassels (Law), who served as moderators. Whittington and Devine conducted a workshop on university conflict-of-interest policies. UVic President Dr. David Strong delivered the opening remarks and welcomed participants to the conference.

Maureen Maloney, Dean of UVic's Faculty of Law, gave the conference's dynamic keynote address, "Challenges, Changes and Costs." She quickly exposed the frustration experienced by those committed to eradicating sexual harassment against women. "The number of complaints and victims is continuing to grow," suggesting, she said, that the rising number of victims may be due to a backlash against women and their demands for equality.

Various studies show that 30 to 60 percent of women have experienced sexual harassment, but only one or two percent registered formal complaints. A smaller percentage of men are also victims of sexual harassment at work or school.

"Policies that have been implemented to deal with the issue serve a useful, but limited

role," Maloney continued. "By themselves they may do more harm than good because they allow some organizations to claim they are dealing with the problem, when in reality they are not. Also, policies on sexual harassment obscure the systemic nature of the oppression of women," she stated.

"We need to change the reality and perception of women and their lives. There are power imbalances due to the lack of political, economic and social equality that women have in relation to men. We need to remedy all of this to be rid of sexual harassment," she asserted.

Maloney stressed that women need to be free from physical and psychological violence against them. Sexual harassment legislation can serve a useful purpose in this regard, she said, pointing out that policies and laws may have a deterrent effect. Moreover, they "serve to challenge the privatization of gender relations and provide a focal point around which concerned groups can merge."

However, sexual harassment legislation cannot remedy the pervasive lack of power that women face in all aspects of their lives, stated Maloney. She pointed out that working women are still predominantly found in the traditional, female-type job "ghettos," especially in low-pay jobs in the sales and service sectors. "We must address the fact that 60 percent of Canadians below the poverty line are women.... We need to accelerate the catch-up rate of pay equity," Maloney emphasized the need for more accessible educational and job training opportunities for women as well as comprehensive child care strategies. She asserted that a revaluing of part-time work that would give part-time workers—who are mostly women—access to pensions, benefits, and job security is necessary. Maloney added that the employment concerns of immigrant women, such as those working as domestics, must also be addressed. In addition to remedying the economic inequality women experience, Maloney said, the personal freedom of women must not be regulated by government.

"Sexual Harassment: A Costly Proposition" was videotaped by Rogers Cablesystems community channel and will be broadcast on channel 11 in the near future.

Crozier nominated for Governor General's Award

Lorna Crozier, poetry professor in the Creative Writing Department, has been nominated for the Governor General's literary award for her book of poetry, *Inventing the Hawk*. The book was published this year by McLelland and Stewart. The other four nominees are Evelyn Lau, Laura Laush, Steve McCaffery and Kathleen McCracken. The announcement of this year's winner of the \$10,000 award for poetry will be made on Nov. 30.

The Ring is published every second Friday during Winter Session at the University of Victoria. The Publisher is Public Relations and Information Services, P.O. Box 3060, Victoria, B.C. V8W 3R4.

International Standard Serial Number
(ISSN): 0318-8419
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Printer: Island Publishers Limited

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The secret of embryonic life sought in Western Larch seed propagation research project



Danylchuk photos

Benkrima (left), von Aderkas and Zaki form research team

BY DONNA DANYLCHUK
With the object of growing more Western Larch (*Larix occidentalis*) trees throughout B.C., the mystery of what makes a somatic embryo develop *in vitro* is being explored by a research team headed by Dr. Patrick von Aderkas (Biology). Somatic embryogenesis is a form of asexual propagation in which a cell of a plant body divides and differentiates into an

embryo. Funded by a Science Council of B.C. technology grant, the team is searching to improve the methods for a high-frequency production of somatic embryos with a high conversion level into mature trees. The project has received grants of \$36,000 each year for the past three years.

"The Western Larch is a fabulous tree. It's beautiful, has excellent wood and is one of the

hardest softwood and deciduous trees. It's wanted by the forest industry. Its wood is used as trusses in roofs. But, because it has such a bad seed set, there are problems with reforestation. We can't get enough Western Larch trees from nature," says von Aderkas.

The Western Larch is a mainstay tree of parts of south-eastern B.C. and the neighbouring American states.

"The research fits into tree improvement," von Aderkas adds. "If you have a seed orchard for genetic testing and reforestation and want to have as many of the desirable genetic lines as possible, biotechnological procedure comes in."

In von Aderkas's lab in the basement of the Petch Building, the research team begins by putting either mature or immature Western Larch seeds onto agar plates. "We induce them to multiply with a chemical treatment, a growth-regulating substance," says von Aderkas. "We begin with one zygotic embryo (it looks like a white finger) and it forms hundreds of genetically identical copies."

When *in vitro* culture, the Western Larch seeds produce thousands of cloned embryos in clusters called embryogenic callus. The embryos would just continue to produce callus if the embryos weren't separated out and induced to grow, explain the researchers.

Once the embryos are separated out, the "true" embryos begin to grow into tiny trees while others continue to produce callus. The tiny true



In the two agar plates in the photo above, the clusters called callus made up of thousands of cloned embryo are shown in the plate at right. The cultured large embryo which have been separated out and induced to grow are shown in the plate at left.

embryos are extremely delicate, having been artificially produced, and will die easily. The researchers are concerned with finding ways to introduce them to natural conditions where they can survive.

It is not known which cells from an explant (a piece of tissue removed from a plant body) of a very juvenile tissue cultured *in vitro* will actually become a somatic embryo. "The difference here is that it is not known which cells will actually take the form of an embryo. This is the mystery—what will make it form into an embryo?" says research team member Dr. Laila Benkrima.

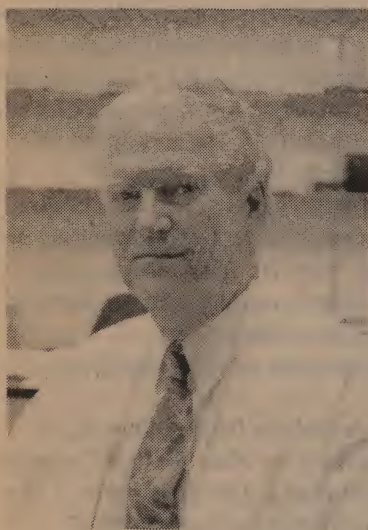
Benkrima has been devoting months to experimenting with different cultural media in an attempt to discover which media will induce the cloned Western Larch embryos to mature like a

true embryo. She received her doctorate in Biology from Paris University, in France, and came to UVic to work with the Western Larch project. Also with the project is Dr. Maged Zaki, visiting professor from Egypt. He is expert in electron microscopy, the study of fine plant structure.

Another task facing the researchers is to learn how to dessicate the artificial embryos at exactly the right stage of embryonic development, and to cover the dried embryos with a seed-like coating, so the final result is an artificial seed which can be used for reforestation. As von Aderkas puts it, "We've been asked to produce seeds which can be germinated to grow into little trees." He expects the research will continue until a satisfactory seed is produced.

Certificate of Merit to UVic-IDC President Harry Davis

Innovation Development Corporation sets up in Campus Services Building



Davis

Harry Davis, President and Chief Executive Officer of the UVic Innovation and Development Corporation (IDC) recently was awarded the Corporate-Higher Education Forum's 1992 Certificate of Merit for distinguished achievement in furthering university-industry research co-operation. The award was bestowed on Davis based on his accomplishments as President and CEO of Seabright Corporation, a technology transfer company associated with Memorial University and similar to the IDC.

The IDC has established offices in the Campus Services Building and has already begun work on several projects to commercialize the results of research by UVic faculty members. The staff currently consists of Davis and Assistant to the President Liz Wharf, and recruitment efforts are under way to assemble the small team of business and technology analysts and others who will help faculty members and outside businesses work together to develop the commercial potential of their ideas, inventions, creations, and discoveries.

Ambitious plans have been laid for the IDC, which is expected to serve as an incubator for new knowledge-based enterprises, increasing the economic benefits the province derives from the University. For now, however, the IDC is starting small and concentrating on quality and responsiveness to faculty needs.

"We want to build a solid base of support on campus to show faculty that we can be of assistance before we create an expanded organization," Davis

explains. But he is quite confident about where it all could lead. "UVic has a tremendous knowledge base in its people; it has facilities that are, in many cases, as good as those anywhere else in the world; and the University is doing some \$17 million in research each year," he says. "With these resources, the economic spin-off potential can be quite significant. When you link this up with the services IDC can provide, you've got a very powerful generator of economic benefits."

Davis is in a good position to know. He served for five years as President and CEO of Seabright, and before that he served for 20 years in senior positions with business related enterprises. Davis brings to UVic the lessons of his successes in these endeavours.

The IDC will offer a wide range of services to its clients. It has already assumed the responsibilities of the UVic Business and Industry Development Centre, including the administration of patents and other intellectual property rights held or sought by the University. When

approached by a faculty member or other person with a product, process, or idea, IDC will evaluate its commercial potential and choose the most promising projects to pursue. It will conduct patent searches, literature searches, and technology assessments from the production and marketing standpoints. It will also offer comprehensive project management services when required and will arrange for outside business advisors and consultants as necessary.

The IDC will help researchers find sources of funding for their projects as well. "There is often a gap when funding for a particular research project runs out and venture capital funding for development of the results of that research is not yet in place," explains Davis. The IDC is designed to help fill that gap by providing the services needed to reassure potential development funding sources that the project will be professionally managed and that market risks, financial risks, and technology risks are minimized.

Davis is quick to point out that the IDC will not be compet-

ing for funds from traditional University funding sources. "We don't take any money from traditional faculty funding sources but only add to the opportunities for faculty to obtain more funds for research and development," says Davis.

As for the IDC's own funding, it has taken over the functions and the remainder of the BIDC budget and has a start-up grant from the B.C. government that will help see it through this fiscal year. The University is providing space, heat, and power, and the Board of Governors has approved a \$500,000 line of credit over five years for the corporation.

"Beyond that," says Davis, "we will find our own sources of funding for the IDC's operating costs. When Seabright started, it had a \$300,000 line of credit from Memorial, and with the help of funding agencies and with our ability to do work and arrange projects we were successful enough to pay our loans back within a few years. I would expect the same level of success at UVic."

Honorary degrees go to distinguished four

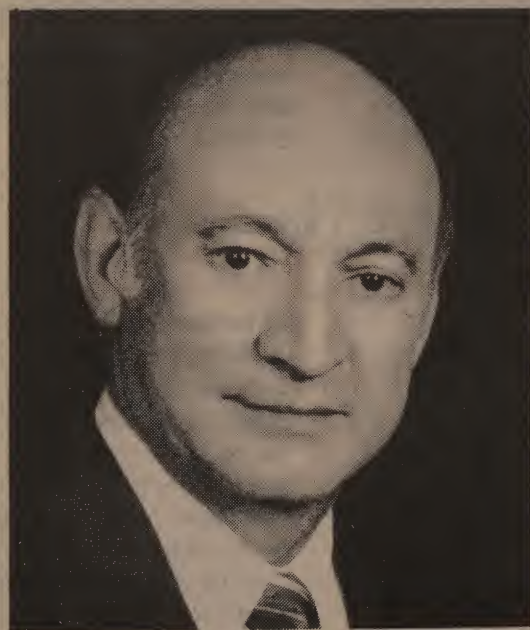
A prominent pathologist and a noted arts administrator from Canada, an expert in pharmacology and chemotherapy from Britain, and an active promoter of Canadian literature in Sweden will be the recipients of honorary degrees during UVic's two 1992 Fall Convocation ceremonies Nov. 28.

The Hon. Robert Rogers, UVic's Chancellor, will confer an Honorary Doctor of Science on Dr. Roger A. Coté, an Honorary Doctor of Fine Arts on John P. L. Roberts, an Honorary Doctor of Education on Lord Perry of Walton, and an Honorary Doctor of Letters on Heidi von Born. Von Born and Coté will receive their degrees at the 10:00 a.m. convocation while Perry and Roberts will receive their degrees at the 2:00 p.m. convocation.



Lord Perry of Walton

Lord Perry of Walton (Dr. Walter L. M. Perry), holds doctorates in both medicine and science from the University of St. Andrews. He had a distinguished academic career at the University of Edinburgh where he was professor of pharmacology, Dean of Medicine and Vice-President. Perry has been published in many journals including the *Journal of Physiology* and the *British Journal of Pharmacology and Chemo-therapy*. He achieved international recognition as one of the founders of the Britain's Open University and became its first Vice-Chancellor. Perry was on the advisory board of B.C.'s Open Learning Agency. In 1957 he was awarded the Order of the British Empire, in 1974 he was knighted, and in 1979, he was granted a peerage.



Dr. Roger A. Coté

Dr. Roger A. Coté was born in Manchester, New Hampshire and received his doctorate in medicine from the Université de Montréal in 1955 and a Master of Science in experimental pathology from Marquette University in Milwaukee, Wisconsin in 1964. He is a diplomat of the American Board of Pathology in both anatomic pathology and clinical pathology. Coté arrived at the Université de Sherbrooke in 1969 as a full professor of pathology and was director of the department until 1977. In 1973, he was named Chairman of the Committee on Nomenclature and Classification of Diseases of the College of American Pathologists and has developed since that time the Systematized Nomenclature of Medicine (SNOMED). In 1979, his peers in the United States recognized his work in the field of medical nomenclature by awarding him the Outstanding Meritorious Service Award by the College of American Pathologists. Coté's current scientific activity is in the organization of clinical data bases for medical knowledge representation and for the development of expert systems. The conferring of his degree is part of the 10th anniversary celebration of UVic's School of Health Information Science.

Heidi von Born was born in Stockholm into a literary family. She spent her adolescence in Helsinki where she learned Finnish. Von Born wrote her first book, a collection of poetry, when she was just 18 years old and still a student. She has since published 24 books, mostly novels, and 10 plays for radio and television. For the past 15 years, she has introduced and promoted Canadian literature. Together with the literary magazine *90-tal*, Van Born has published various Canadian poets including Michael Ondaatje, Gwendolyn MacEwan, Barry Callaghan, Robin Skelton and Daphne Marlatt. She has introduced many of Canada's leading authors, including Robertson Davies, Irving Layton, Mavis Gallant, Anne Hébert, Margaret Atwood and Nino Ricci at the prestigious Gothenburg Bookfair. Van Born is currently working on an anthology of Canadian poets and has just completed a novel set in Victoria. Van Born was a Lansdowne Scholar at UVic in 1988.



Heidi von Born

John P. L. Roberts is currently the Dean of the Faculty of Fine Arts at the University of Calgary. Following study at the State Conservatorium of Music at Sydney, Australia, Roberts joined CBC Radio in 1955 as a music producer. During his subsequent career there, Roberts pioneered the development of FM-stereo broadcasting in Canada, launched national CBC talent competitions, commissioned countless works from Canadian composers and established the CBC as the major producer of concert music recordings in the country. Roberts is a former Head of Music (Radio) of the CBC and has been an active member of nearly 50 arts boards and key committees at home and abroad. In 1978, Roberts received the Queen's Silver Jubilee Medal. In 1981 he was awarded the Cross of Honour for Science and the Arts from Austria, the same year that he was made a Member of the Order of Canada.



John P.L. Roberts

Mark Mitenko will be remembered

Mark Mitenko passed away Nov. 13 from complications during treatment for Hodgkin's disease. He will be awarded his honours Math degree posthumously at the Nov. 28 convocation.

A Winnipeg native, Mitenko transferred to UVic from the University of Manitoba in 1987 when his parents relocated to Nanaimo.

Mitenko was an outstanding student, graduating with a 8.7 GPA in honours Mathematics. He became sick the day before his Christmas exams in 1991, but despite the chemotherapy and radiotherapy he had to undergo for almost a year, he completed his final year with distinction, was accepted by the University of Waterloo graduate school to continue his studies in pure Mathematics, and was recipient of the prestigious NSERC graduate scholarship.

Mitenko's talents were not limited to the academic world. He had a broad range of musical and artistic abilities. The latter, combined with a unique sense of humour, made him a natural cartoonist, and he worked for both the University of Manitoba and UVic newspapers. His pen was always ready to capture something he found amusing. One of his professors once laughingly complained to Toni Garrett, Mitenko's Co-op Coordinator, about his penchant for drawing people.

"He used to sit in my class and draw the people around him. It drove me crazy. But he was very good, and they were great caricatures. Of course, it wasn't long before I found out how brilliant he was, and then it didn't matter."

Mitenko was a popular student at the Department of Mathematics and Statistics, impressing everyone with his wit, gentleness and, finally, his courage.

"He was an absolutely unique individual," says Dean David Lemming. "We all admired his perseverance and his ability to maintain a positive attitude. For all of us who knew him and taught him, he has left us saddened, but we are grateful that we had an opportunity to share a part of his life."

Mark Mitenko was 23.

Courageous grad recognized with posthumous degree

UVic's Political Science department mourned the loss of one of its top graduate students in Feb. 1991, when Judith-Anne Williams died of a massive brain hemorrhage. Now the Faculty will have an opportunity to honour Williams when she is awarded a posthumous masters of arts degree at Convocation, Nov. 28.

Williams suffered from severe diabetes all her life, and in her final years had to deal with incipient blindness and periodic brain seizures. Despite this condition, she had an excellent record at UVic, receiving a BA with First Class Honours in 1987 and completing the course work for her masters degree, also with first class standing. She was close to defending her thesis when she died.

"It is remarkable that although she had been ill for a very long time, many people in the Department were not aware of her condition," says Dr. Warren Magnussun, Williams' supervisor. "She never relied on her illness to make excuses or used it as a crutch."

After her death, Magnussun, read her nearly-completed thesis.

"It took some time to find the finished copy of the manuscript she was working on when she died," recounts Magnussun, "but when I read it, I realized it was so near to completion that it merited proper examination."

He showed it to the others on her supervisory committee and the committee unanimously agreed that the degree should be awarded.

Although there is a precedent for awarding a posthumous degree when a student has successfully completed all degree requirements, this is the first degree UVic has awarded posthumously to a student whose final work has not been defended.

"I think everyone who taught her would agree that she met or surpassed the standards for this level of study," says Magnussun.

"We had great respect for her courage and determination," adds Dr. Norman Ruff, then the graduate advisor with the Department of Political Science. "She was so close to graduation that we wanted to honour her tireless efforts and her memory."

Williams' father, Geoff, will accept the degree on her behalf.



GRADUATE STUDIES BULLETIN

Message from the Dean

DR. GORDANA LAZAREVICH

One of the aspects of my position as Dean of Graduate Studies is the continued discovery of the variety, diversity, and quality of our graduate programs.

That diversity is manifested in our 32 departments or schools offering graduate degrees. These include studies in the environment, from marine ecology to oceanography and geophysics; studies in the quality of life, from genetic studies to organic photochemistry; nuclear and particle physics, (some graduate students are associated with TRIUMF and have worked with the Asterix group at LEAR); world cultures of the past and present, including our own Canadian culture; new trends in technology, from software engineering and logic programming to microwave studies; research into aging, as well as training in the arts.

Students' research takes them overseas as participants in CIDA projects, to Jordan on excavating trips, to the British Library for the study of 18th century music manuscripts, and underwater, for research on the life systems of sponges. It takes them into the community and the interior of our province to work on projects varying from social semiotics of the Vancouver street youth culture, to computing costs of various treatments for lung cancer. In addition to our campus programs, we have a number of off-campus programs in the interior of British Columbia offered by the Faculty of Education for school teachers in quest of upgrading their education.

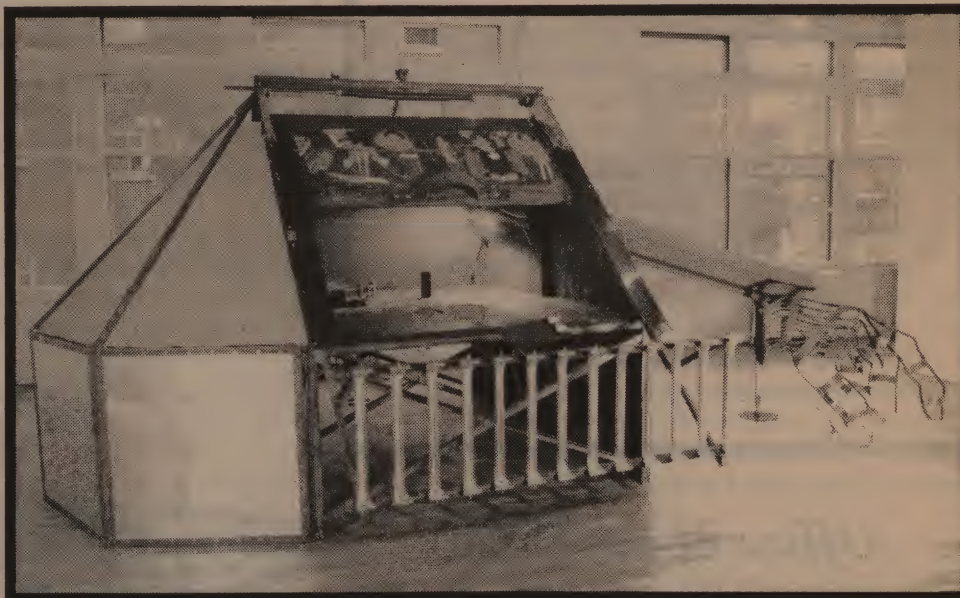
We have mid-career mature students, public servants in the process of acquiring new knowledge and the newest techniques in order to apply them to their field of expertise. We also have single parents, native, and visa students. About one sixth of our student population comes from countries other than Canada.

The purpose of this special supplement to the *RING*, the first of its kind pertaining to graduate studies on this campus, is to communicate to the university community as well as the Victoria community at large, information about our Faculty of Graduate Studies: our staff, statistics regarding enrollment figures, programs, variety of degrees offered, and the type of research conducted by our graduate students.

Our graduate students are our country's most valuable resource. They are our future intellectual leaders. Their work in the areas of basic and applied research will help Canada compete in the global economy, help in the communication between citizens in a multi-ethnic society, and improve the quality of all our lives.

In the issues that follow we will highlight other student projects, special achievements, and graduate programs—such as the Multidisciplinary Program in the Faculty of Human and Social Development—which are unique to our University. Student activities—such as papers read at conferences—will be featured in forthcoming issues.

This insert is the first in a series of communications from Graduate Studies to appear in the *RING*. Further bulletins will appear in the January, February, and March editions of the *RING*. I welcome input from you regarding various projects, human interest stories, achievements of our alumni, and any other information that will contribute toward developing a sense of community among our students on campus. Graduate Studies at the University of Victoria has a story that must be told!



"House of Loss," 1989
By Visual Arts Graduate Student, Nick Brdar

GRAD STUDENT LOOKS TOWARD HYDROGEN AGE

By SHELAGH PLUNKETT

Gary Schubak believes that if underwater vehicles were fuelled by hydrogen the car you drive to work would eventually emit nothing more noxious than water.

"Hydrogen fuel cells are a very clean source of power—water is the only by-product. If we want to continue driving cars and running buses we are going to have to find energy conversion systems less harmful than what we use today," said Schubak in a recent interview.

The problem with hydrogen fuel cells is the cost of producing them and that, says Schubak, is where underwater vehicles come in.

"If we can find enough specialized niches for hydrogen technologies, the cost of production will eventually drop. When that happens hydrogen fuel cells will become a viable source of energy for widespread use."

Schubak who holds an M.Sc. in Mechanical Engineering, successfully defended his master's thesis in September. His research looked at three different power systems for autonomous underwater vehicles. Schubak's thesis indicates that, for many applications, fuel cells that use liquid hydrogen are the best choice of power system.

He found that for endurance and mission frequency, fuel cells stand up better than either lead-acid batteries or diesel engines.

Schubak's thesis is unique in a number of ways. To begin with, his research has close ties to local industry.

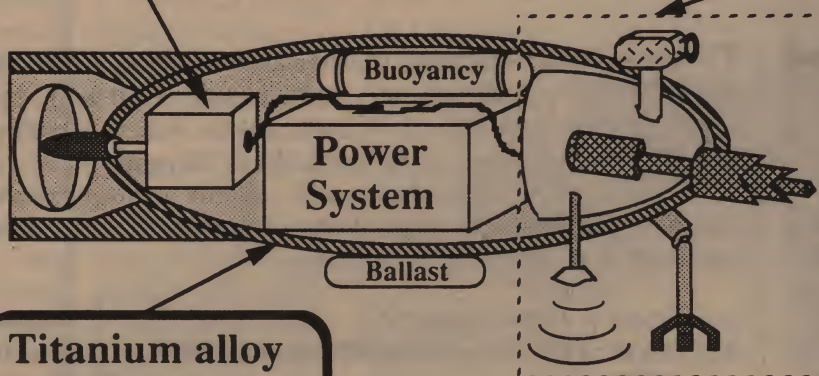
His work evolved out of a study conducted for a consortium of B.C. companies called SPIRIT. SPIRIT approached the Institute for Integrated Energy Systems of Victoria (IESVic) where Schubak was working with Dr. David Scott, also his thesis advisor. In conjunction with Western Sub-Sea Technologies, Schubak prepared

Propulsion

Mass = 100 kg
Volume = 0.035 m³
Propulsion power¹ = 12.4 kW
 η = 65 %

Payload

Mass = 1000 kg
Volume = 1 m³
Hotel Power¹ = 1.5 kW (continuous)
On Station Power¹ = mission dependent



Titanium alloy Shell

Diameter = 1 m
Length = 5 m
Thickness = depth dependent
Displacement = 4 m³

GARY SCHUBAK

Although Schubak's hypothetical vehicle has never been built, he used this computer generated design to test the relative properties of three different power systems.

a report for SPIRIT which was included in a feasibility study they presented to the federal government. One year later, the consortium has received funding to prepare a more complete design plan.

Schubak explained another way in which his thesis differs from others which have compared power systems for underwater vehicles.

"People are looking for a service. They aren't really interested in a particular form of energy or technology. For that reason I chose to compare how well each power system provided a particular service."

To accomplish this, Schubak had to specify what

the hypothetical underwater vehicle in his study was to do. For his thesis he defined the service in a general way so that a wide range of possibilities could be examined. He used examples of mapping the bottom of Victoria harbour and repairing an undersea pipeline.

"Previous studies have not explicitly defined what service the underwater vehicle was to provide. So, they were unable to reach meaningful conclusions about which power system is preferred."

Schubak recognized that underwater vehicles are used for a range of functions. He categorized these functions and recommended that different power systems are suited to different types of jobs. This is unlike other researchers who have attempted to find a single power source to fulfill all possible services.

Although Schubak's thesis is very different from the study he conducted for SPIRIT, it was that work which inspired his recent research.

"Working with SPIRIT was helpful in building a foundation for my thesis. Although I was a student while at IESVic I hadn't come up with a thesis concept. One idea I had was to look into converting the E&N Railway to hydrogen fuel cell power plants, but there was little

commercial interest in that. Through SPIRIT I had the opportunity to work with local companies on a project of active commercial interest," said Schubak.

Schubak is hopeful that through research like his, specialized uses for hydrogen fuel cells will be found.

"If the performance advantages of fuel cells become recognized then people will start producing them in larger numbers. When that happens the cost comes down. Once the cell is cost efficient it will become available for a wide range of uses."

And then, we can all breathe more easily.

McKenzie Scholarship

Application Submissions Requested

Funds have been raised in Canada by friends, colleagues, and former students of Professor Robert McKenzie to establish an annual award in his memory tenable at the London School of Economics and Political Science for a candidate for a Master's or research degree. Applications should have a first degree from a Canadian university. Students already registered at the London School of Economics or new candidates may apply.

The value of the award will be \$5,000 (Canadian). It may be held concurrently with other awards.

Deadline for applications for the year 1993/94 is March 31, 1993.

Apply to:

The Scholarships Officer
London School of Economics
and Political Science
Houghton Street
London, England
WC2A 2AE

Application for admission to the School should be made to the Graduate Admissions Office at the above address as early as possible commencing in November, 1992.

For more information contact the Office of Graduate Studies.

Office of the Dean

The office of the Dean provides the following services to graduate students: administration of University of Victoria Fellowships and internal awards; procedures for NSERC, SSHRC and Science Council of British Columbia award applications; processing of recommendations for membership in the Faculty of Graduate Studies; scheduling of oral examinations; processing of program extensions and permanent withdrawals; administration of Graduate Student Travel Grants and assistance with information on external funding available to graduate students. All enquiries may be made through 721-7970.

Dean	Dr. Gordana Lazarevich
Associate Dean	Dr. Bob Miers
Sec. to the Dean	Carolyn Clark
Sec. to Associate Dean	Lisa Labrie
Clerk-Typist	Andrea Lee

Graduate Admissions and Records

The Graduate Admissions and Records Office is responsible for processing admissions, registrations, fee assessments, grades, program forms and applications to graduate. The staff are able to respond to your questions on most University and Faculty regulations which affect graduate students.

Students may contact the clerk responsible for their faculty.

Director	Kevin Paul
Admissions/Records	Ann Nightingale

General inquiries and transcript requests should be addressed to:

Secretary	Geri Richmond 721-8717
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Students may contact the clerk responsible for their faculties:

Education	Trish Morrison 721-7974
Engineering	
Public Administration	
Human & Social Dev.	Liz Bales 721-8573
Humanities	
Social Sciences	Terri Crawford 721-7976
Science	
Fine Arts	
Physical Education	Barbara Reed 721-8715

Message From the Executive of the Graduate Students Society

By CARRIE BRONSON

The University of Victoria Graduate Students' Society (GSS), charged with the mandate of providing graduate students a representative voice on campus, presently serves over 1,800 students.

The seven-member executive oversees all aspects of GSS business. The current executive represents many diverse disciplines at UVic.

This academic year the GSS has already sponsored a successful orientation day for graduate students, produced a handbook, and has sent the second issue of our newsletter to print.

Graduate students are appointed, through the GSS, to sit on many university wide committees providing necessary representation on a wide range of issues important to graduate students.

As a result of a 22 per cent growth in the graduate student population over the past two years, the GSS has reached the point where its structure must be re-evaluated to better serve its membership. The GSS constitution, hiring and personnel policies, and elections and appointments procedures are currently being reviewed. Both academic and non-academic issues are being addressed by the current executive.

Relationships between the GSS and other groups on campus, such as the University Administration, Student and Ancillary Services, and the University of Victoria Students' Society as well as with other graduate student societies across Canada are being reassessed.

UVic is one of few universities in Canada that has a graduate student society which owns its own building. Excellent fiscal management by the GSS is exemplified in the fact that the outstanding mortgage on the George and Ida Halpern Centre for Graduate Students will be retired early next year. Not bad for a one-year-old, million dollar building. The GSS is looking forward to providing representation and advocacy for all graduate students this coming year.

GSS Executive:

President	Carrie Bronson, Sociology
Vice President	Vacant
Vice President External	Sangwon Yoo, Political Science
Secretary	Irene Hay, Biology
Treasurer	Pat Bartier, Geography
Publicity	Bob Beck, History



PHOTO BY DON PIERCE

The George and Ida Halpern Centre for Graduate Students

A Few Words About our Programmes

The University of Victoria has 32 graduate departments or schools offering ten different types of Master's degrees. Sixteen of those programmes offer Ph.D. degrees. In addition, UVic has two interdisciplinary programmes which are unique to the university: the Multidisciplinary Master's in Policy and Practice in Health and Social Services, and the M.A. in Contemporary Social and Political Thought.

Listed below are the departments offering graduate programmes, some of which—such as the School of Business—are very young, while others—such as Physics and Astronomy—carry the distinction of being among the oldest and most established on campus.

Department of Anthropology, M.A.	Department of Germanic Studies, M.A.
Department of Biochemistry and Microbiology, M.Sc., Ph.D.	Department of History, M.A., Ph.D.
Department of Biology, M.Sc., Ph.D.	Department of Linguistics, M.A., Ph.D.
School of Business, M.B.A.	Department of Mathematics, M.A., M.Sc.
Department of Chemistry, M.Sc., Ph.D.	Department of Mechanical Eng., M.A.Sc., M.Eng., Ph.D.
Department of Classics, M.A.	School of Music, M.A., M.Mus., Ph.D.
Department of Computer Science, M.A., M.Sc., Ph.D.	(Musicology; Performance; Composition; Musicology with Performance)
School of Earth and Ocean Sciences, M.Sc., Ph.D.	School of Physical Education, M.A., M.Ed., M.Sc.
Department of Economics, M.A.	(Coaching Studies; Sports and Exercise Studies)
Faculty of Education, M.A., M.Ed., Ph.D.	Department of Physics and Astronomy, M.Sc., Ph.D.
Department of Arts in Education (Art Education; Music Education)	Department of Political Science, M.A.
Department of Communication and Social Foundations (Curriculum Studies; Educational Administration; Language Arts)	Department of Psychology, M.A., M.Sc., Ph.D.
Department of Psychological Foundations (Counselling; Educational Psychology; Special Education)	School of Public Administration, M.P.A.
Department of Electrical and Computer Engineering, M.A.Sc., M.Eng., Ph.D.	Department of Sociology, M.A.
Department of English, M.A., Ph.D.	Department of Theatre, M.A., M.F.A.
Department of French Language and Literature, M.A.	Department of Visual Arts, M.F.A.
Department of Geography, M.A., M.Sc., Ph.D.	

Interdisciplinary Programmes:

Contemporary Social and Political Thought, M.A.
(Philosophy, Political Science, Sociology)
Faculty of Human and Social Development, M.A., M.S.W.
(Interdisciplinary programmes with streams in Child & Youth Care; Nursing; Social Work)

● MAKING THE CROSS-CULTURAL LEAP POSSIBLE ●

SERVICES ON CAMPUS FOR INTERNATIONAL STUDENTS

By SHELAGH PLUNKETT

Most people do not think of UVic as a university with a multicultural student body. The fact is, there are few international students on campus. Of the 1,800 graduate students on campus, just over 300 are international graduate students. The largest portion come to UVic from the Peoples' Republic of China, but many—22 students—have no compatriots on campus. Graduate students currently at UVic come from 48 different countries as diverse as Ireland, Uganda, Algeria and Colombia. Many are studying in the sciences while others are here writing their doctoral or master's thesis in theatre, linguistics or German. The only apparent similarities among these students are their determination, their sense of adventure and their status as visa students.

UVic is a non-recruiting university. In other words, the university does not actively advertise for students in embassies and consulates around the world. Students who are here from other countries have sought out this university.

"Most of the students who come to us from other countries hear about us through friends. They may know somebody who has a cousin whose best friend studied here once. Often they have heard about somebody who had a good experience at this university and decide to apply on that basis," said Patricia Brooke, Coordinator, Special Student Programs, Student and Ancillary Services in a recent interview.

Student and Ancillary Services is usually the first contact that an international student has with UVic. All international students who have been accepted by the university are sent a copy of the International Student Handbook, published annually by Student and Ancillary Services. The handbook contains an abundance of information ranging from year-round temperatures in Victoria to what documents immigration will require at the border and what kinds of vegetables are found in local grocery stores. For most international students this book is their introduction to Canada, Victoria and UVic.

When they arrive in Victoria, international students have the choice of staying with a host family for their first

week. The host family program is free to students and is arranged by Student and Ancillary Services. As well as housing the students for a week, families volunteer to orient them to Canadian culture. That can include everything from helping a student find permanent accommodation to explaining our banking system.

Other services are available on campus. International students can make use of the Association of Foreign and Canadian Students. This is a student-run club working to ease the sense of isolation many international students face. The club organizes a welcome reception each September and a number of cultural and social events throughout the year. They also keep students informed of university issues affecting them.

Visa students face complex challenges which go beyond coping with daily life in a foreign city. Many difficulties are specific to their studies on campus.

English is not the first language of most international students at UVic. Of the 300 graduate visa students at UVic this year, only 56 come from English-speaking countries. For the remaining 244, having to study and converse in English all day can be an exhausting experience.

Students have to pass a Test of English as a Foreign Language (TOEFL) in order to be accepted to the university. However, TOEFL tests primarily for reading skills, not for listening or speaking skills. Many students who pass TOEFL with proficiency have difficulty following lectures and dealing with the intricacies of defending a thesis. The English Language Centre has created a program specially designed for graduate students facing these and other challenges.

The ten week program is run twice a year and can accommodate up to 15 students. Its main focus is in speaking and listening skills. Students are recommended by their graduate advisor. Early in the program, usually during the second class, students are video-taped. After viewing the tape, students discuss their concerns with the teacher and, together, they decide what points to work on.

"The program is based on what students will encounter during their studies at UVic. We look at all kinds

of things but really focus on communication skills—the ability to listen and to ask questions," said Elinor Rhynas, Program Coordinator for the Language Centre.

Each student gives a presentation on some aspect of their field of study. Presentations have to be geared to the lay person, a challenge in both language and content, and students have to ask questions at the end of each presentation. In this way, both audience and speaker learn through the experience.

Although the program focuses primarily on language skills, it also offers cross-cultural training and orientation in the culture of the classroom and research lab.

Many Canadian students assume that they should question a professor or speak out in class, but to most visa students these are completely alien acts. Without being acculturated to classroom behaviour and the expectations of professors these students shoulder a disadvantage beyond any language problems they might have.

"The cross-cultural component of the program is absolutely essential," said Rhynas.

For the past two years the Faculty of Graduate Studies has funded the program. Rhynas believes that this makes it unique in Canada.

"This program is very successful. The students who come to us are highly motivated. They want to learn. When they come to the Language Centre they are doing our program on top of their graduate research. Even so, attendance is always high," said Rhynas.

As well as services designed to help visa students adjust to life on campus and in Victoria, there are a number of social clubs organized by international students. Some are formed through the campus E-Mail service while others meet regularly.

Although these services do not eliminate the complexities of life as a visa student they do ease those difficulties. And, they allow more international students to return home with fond memories of UVic. Which means more students will be telling their friends who will tell their cousins about the good reasons for applying to the University of Victoria.

Scholarship Invitation

The London House Association of Canada invites applications for scholarships to support graduate study in London. The scholarships, valued at up to \$7,000 a year, will pay for the accommodation of two or more students—Canadian citizens or landed immigrants—at London House or William Goodenough House, graduate residences for overseas students in Mecklenburgh Square, near the University of London. Students in all post-graduate degree programmes are eligible. The scholarships are tenable for any period between three months and a year and will not normally be renewable.

The London Goodenough Trust for Overseas Graduates is a non-profit-making independent Trust providing accommodation, in a collegiate atmosphere and in congenial surroundings, for some 400 single and 140 married graduate students from the Commonwealth, the USA and Europe.

Deadline for applications is December 15, 1992.

Apply to:

London House Association of Canada
Mr. Robert N. Black, Chairman
318 Douglas Drive
Toronto, Ontario
M4W 2C3

For more information contact the Office of Graduate Studies.

EXPANDED HORIZONS FOR VISA STUDENT

Hye-Soon Kim does not fit the stereotypical mold of an international student. Outspoken, political and well known among campus faculty as a active member of the student body, Kim is often mistaken for a Canadian.

"I'm writing my PhD. in theatre-history. I'm not a computer science student and I'm not shy or quiet. People don't believe I'm a visa student from South Korea," said Kim in a recent interview.

Kim is one of only two South Korean students on campus. In 1985 she came to Canada and wrote her M.A. thesis at UBC. Following a year in South Korea, in 1988 she returned to complete her PhD. here at UVic under Dr. Alan Hughes' supervision. Kim says that after seven years as an international student she feels as though she is an exile from both South Korean and Canadian cultures.

"I don't really fit into either culture anymore. I'm not a Canadian but I'm not a traditional Korean woman either."

As a child, Kim was precocious and lively. She remembers being asked what she would study when she grew up. At 20, however, the questions changed and she was asked when she planned to marry.

"Very few Korean women go to university. People thought I was unusual when I was doing my B.A. in Korea.



PHOTO BY DON PIERCE

Hye-Soon Kim studied and performed in Korean-dance theatre for four years and is incorporating it into her Ph.D. dissertation.

By the time I left to come here, I was 28 and past the age at which Korean women are told they should marry."

Kim says her experience as an international student has left her with a broader vision of her culture and a greater global awareness. Kim sees similarities between Korea's struggle to maintain an identity separate from Japan and China, and Canada's cultural difficulties in the face of Britain and the U.S.

"I have learned much more than just what I studied. Being here has been very liberating. Although as a foreign student I

feel singled out because of my difference, I have also had much more freedom."

Kim's advice to other international students, particularly to South Korean women, is to become actively involved in the learning process. Her own attitude has been to learn from all her experiences in Canada and to use her difference as an advantage.

"I no longer feel I have to conform to either culture. I have always been an individualist and my time in Canada has reinforced that."

Once her PhD. is complete, Kim plans to return to South Korea where she will teach, learn to play the Korean drum and seek out a play which she can workshop and produce.

Student Award Winners

National and International Awards—1992-93

A number of our students are holders of such major national and international awards as the Natural Science and Engineering Research Council (NSERC), Social Science and Humanities Research Council (SSHRC), Medical Research Council (MRC), the Commonwealth Scholarship and the provincial GREAT and STARS awards. One student, R. Duncan Kirkby of the Department of Psychology, is the recipient of a grant from the Savoy Foundation, one of ten in Canada.

While other discipline-specific awards, available through endowed scholarships, are administered to students through the Office of Graduate Studies, only the external award holders are listed below.

CLOUTHIER, Sharon	Biochemistry & Microbiology	GREAT	KOHAN, Kevin	English	SSHRC
LEAL, Isabel	Biochemistry & Microbiology	GREAT	NIECHODA, Irene	English	SSHRC
NOBLE, Michael-Anne	Biochemistry & Microbiology	NSERC			
STEBECK, Caroline	Biochemistry & Microbiology	NSERC	BRAY, Gillian	Geography	NSERC
THOMAS, Stephen	Biochemistry & Microbiology	GREAT/NSERC	KADONAGA, Lisa	Geography	NSERC
WONG, Kevin	Biochemistry & Microbiology	SSHRC	HVENEGAARD, Glen	Geography	NSERC
BEAUDET, Luc	Biology	NSERC			
BYUN, Ashley	Biology	MRC	MCDANIEL, James G.	Health Information Science	MRC
CAROLSFELD, Joachim	Biology	GREAT	PETERSON, Gail	Health Information Science	NSERC
COTTRELL, Paul	Biology	GREAT			
DAVIS, Theodore	Biology	NSERC	AYUKAWA, Midge	History	NSERC
DEBRUYN, Adrian	Biology	NSERC	INOUE, Yuichi	History	Gov. Canada Award
DOWER, John	Biology	NSERC	JOHNSTON, Susan	History	NSERC
GOODMAN, Douglas	Biology	NSERC	SCHORB, Brenda	History	SSHRC
HAY, Irene	Biology	GREAT	STREET, Kori	History	SSHRC
LAITINEN, Ann-Marie	Biology	GREAT			
LAM, Eunice	Biology	GREAT	BLACK, Martha	History in Art	SSHRC
MACARTHUR, Andrew	Biology	NSERC			
MILLIGAN, Barry	Biology	NSERC	SCELLENBERG, Murray	Linguistics	ASI
MOREWOOD, Dean	Biology	NSERC	XUE, Ping	Linguistics	SSHRC Post Doc. Fellow
PEPIN, Steeve	Biology	NSERC			
POWELL, James	Biology	GREAT	BAKKER, Lennard	Mathematics & Statistics	NSERC
SKAALID, Susan	Biology	GREAT	MONTGOMERY, Patrick	Mathematics & Statistics	NSERC
TILLIPAUGH, Donald	Biology	STARS	POPESCU, Mona	Mathematics & Statistics	ASI
CHAK, Becky	Chemistry	NSERC	AUDET, Nicholas	Mechanical Engineering	ASI/NSERC
WHITCOMBE, Sandra	Chemistry	NSERC	MILROY, Michael	Mechanical Engineering	NSERC
			PITTENS, Kenneth	Mechanical Engineering	NSERC
DUDLEY, Dennine	Classics	DeGroot Fellowship	ROUSSEAU, Joseph	Mechanical Engineering	ASI/NSERC
			SANDERS, Michael	Mechanical Engineering	NSERC
CATTELL, Kevin	Computer Science	NSERC	SCHUBAK, Gary	Mechanical Engineering	ASI/NSERC
EVANS, Patricia	Computer Science	NSERC	STYLIANOU, Judith	Mechanical Engineering	GREAT
KNIGHT, Brent	Computer Science	ASI/NSERC	TEACHMAN, Michael	Mechanical Engineering	NSERC
MACDONALD, Robert	Computer Science	NSERC	WELLS, John	Mechanical Engineering	NSERC
NADON, Jacqueline	Computer Science	ASI/NSERC	WILD, Peter		
TILLEY, Scott	Computer Science	GREAT/IBM Fellow			
WIEBE, Philip	Computer Science	ASI/NSERC	GRANT, Wendy	Music	SSHRC
WONG, Kenny	Computer Science	NSERC			
WRIGHT, Darin	Computer Science	ASI/NSERC	GIBSON, Gail	Physical Education	SSHRC
BOHACH, Lisa	Earth & Ocean Sciences	NSERC	DEPROPRIS, Roberto	Physics & Astronomy	ASI
MYERS, Paul	Earth & Ocean Sciences	TRI-COUNCIL Fellow	DIORIO, Daniela	Physics & Astronomy	GREAT
			KNOWLES, Paul	Physics & Astronomy	NSERC
TUMUKWASIBWE, Enoth	Economics	Commonwealth Sch.	PERRY, Philip	Physics & Astronomy	NSERC
			ROSVICK, Myron	Physics & Astronomy	NSERC
			RUTLEDGE, Glen	Physics & Astronomy	ASI/NSERC
BALAJI, Uma	Electrical & Computer Eng.	Commonwealth Sch.	SIMARD, Luc	Physics & Astronomy	NSERC
BURNETT, Rick	Electrical & Computer Eng.	NSERC	VINCTER, Manuella	Physics & Astronomy	NSERC
CAMPOS, Marcello	Electrical & Computer Eng.	Gov. Brazil Scholar	WHITE, John		
CAUGHEY, David	Electrical & Computer Eng.	NSERC			
CHANA, Jatinder	Electrical & Computer Eng.	ASI	KOEHN, Corinne	Psychological Foundations	SSHRC
DELIYANNIDES, George	Electrical & Computer Eng.	ASI			
DIMAKOPOULOS, Vassilios	Electrical & Computer Eng.	ASI	COATES, Linda	Psychology	SSHRC
ERLIC, Mile	Electrical & Computer Eng.	GREAT	GONZALES, Valerie	Psychology	NSERC
FAIR, Ivan	Electrical & Computer Eng.	NSERC	HANNESON, Darren	Psychology	SSHRC
FENDER, David	Electrical & Computer Eng.	NSERC	HINE, Donald	Psychology	MRC
HOLFORD, Stephen	Electrical & Computer Eng.	ASI/NSERC	HOPP, Grace	Psychology	Savoy Foundation Award
HOWELL, Randy	Electrical & Computer Eng.	NSERC	KIRKBY, Duncan	Psychology	SSHRC
KHAN, Shahadatullah	Electrical & Computer Eng.	Commonwealth Sch.	MAGGS, Jennifer	Psychology	NSERC
LE, Jianping	Electrical & Computer Eng.	GREAT	MACDONALD-MISZCZAK, Leslie	Psychology	NSERC
MENEMENLIS, Dimitris	Electrical & Computer Eng.	GREAT	SAWCHYN, James	Psychology	MRC
NETTO, Sergio	Electrical & Computer Eng.	Gov. Brazil Scholar	SEARS, Heather		
NEVILLE, Stephen	Electrical & Computer Eng.	GREAT/NSERC			
PAYNE, Rodney	Electrical & Computer Eng.	Commonwealth Sch.	PATERSON, Erika	Theatre	SSHRC
SCHNORR VON CAROLSFELD, Rudolf	Electrical & Computer Eng.	GREAT	LYNE, Dany	Theatre	Jack King Scholarship
SVASTO-XUTO, Usa	Electrical & Computer Eng.	CIDA Scholar			
TELLAMBURA, Chinthinanda	Electrical & Computer Eng.	Commonwealth Sch.			
XIAO, Shujun	Electrical & Computer Eng.	GREAT			
YANG, Charlie	Electrical & Computer Eng.	NSERC			
YU, Ming	Electrical & Computer Eng.	GREAT			

The Search for an Immersion Vaccine for Salmon

Microbiology Student Julian Thornton Reports on his Research

The bacterium *Aeromonas salmonicida* is the causative agent of salmonid furunculosis, a disease capable of causing serious losses in both cultured and wild stocks of salmonid fish. Losses in revenues at fish farms and hatcheries due to furunculosis is increasing on a global basis. This is likely due to the increasing amount of Atlantic salmon farming, as this species of fish is more susceptible to furunculosis than other salmonids. Vaccination is now becoming essential in hatcheries and farms.

As of 1991, the world market of farmed salmonid fish was approximately 284,000 metric tons, with 170,000 tons from Norway; 35,000 tons from the UK; 30,000 tons from Canada and 10,000 tons from the USA. Of the Canadian production, B.C. production accounts for about 10,000 tons. These production figures are projected to increase at an average annual rate of seven per cent, and Canada is predicted to become the second largest salmon producer (after Norway) in the present decade. The total value of Atlantic salmon stocks in B.C. is estimated to be approximately \$40 million. Loss of stocks due to furunculosis are approximately six to ten per cent even after vaccination with the presently available furunculosis vaccines. This leads to a potential loss of fish value of approximately \$2.4 to four million annually in B.C.

The development of an effective vaccine for this disease, that does not require administration by injection,

has eluded researchers since the first oral vaccine trials in 1942. Until now, the vaccines developed have been killed bacteria (bacterins) administered either orally, by injection, or by immersion or spraying. So far, injection is the only route of administration which has provided reasonable levels of protection for *A. salmonicida* vaccines. Although amenable to mammalian vaccination, injectable vaccines are not as practical or desirable as immersion vaccines for vaccinating large fish populations.

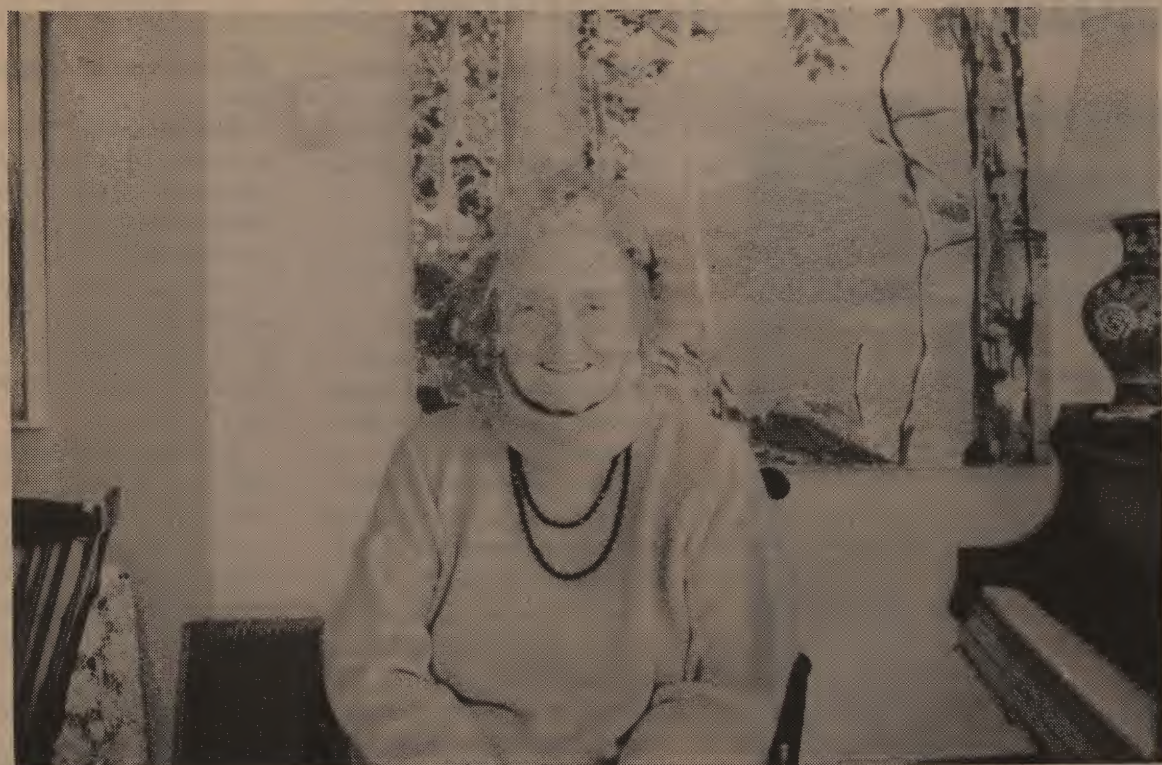
As it was our goal to construct a live vaccine, we selected a mutant strain of *A. salmonicida* deficient in various aspects of metabolism. We then examined many of the characteristics of *A. salmonicida* that are associated with the ability to cause disease. For example, the new vaccine strain (NVS) was demonstrated to possess all normal cell-surface components, as well as the ability to synthesize and export the normal complement of extracellular products when compared to the disease causing parental strain. Studies that followed the fate of the NVS in fish cells, demonstrated that the NVS was able to invade these cells like the wild type parental strain, but was not able to replicate in, or kill, the fish cells. When administered to fish, the NVS entered the fish via the gills and spread to the different tissues in an identical pattern to that of the disease causing bacteria, but was effectively cleared within two to three days. This mock infection without clinical signs of disease is the aim of the new

vaccine, and is responsible for the stimulation of protective immunity. The NVS was subsequently shown to provide unprecedented levels of protection against disease when applied as a simple immersion vaccine to both trout and salmon. When administered by immersion (with a subsequent boost), this vaccine was capable of eliciting a high level of immunity to fish. Fish that have received the NVS become 1,000 to 10,000 times more resistant to furunculosis compared to about 100 times more resistant for those receiving the presently available injectable furunculosis vaccines.

In this instance, by selecting a bacterial strain harbouring three spontaneous, disabling mutations, the potential of reversion of the NVS to a disease causing bacteria is essentially impossible. It is also very significant that this vaccine strain cannot survive in environments such as sea water, ground water, or lake water. These features of the NVS ensure no environmental impact. It should be noted that disease causing strains of *A. salmonicida* are already common components of the normal flora of the above mentioned environments.

This research carried out at the University of Victoria suggests that the construction of a multiply disabled strain of *A. salmonicida* for use as an immersion vaccine is a viable option for the control of salmonid furunculosis, offering an optimistic solution to an important problem plaguing a growing segment of the B.C. economy.

Visual Arts grad paints with the light of the day



Olive Wright

BY ROBYN BUTLER

On Nov. 28, 760 students will attend the University's Fall Convocation to accept their degrees. Olive Wright will be there, perhaps a little reluctantly. She is 78 and sorry to see her university career over.

Wright will accept her BFA in Visual Arts after attending the university on a part-time basis since 1977. Due to paralysis and other complications from diabetes, she had to take time off from her studies, but she persevered and kept up with her courses whenever she could.

"She certainly has the will of a very determined person," her sculpture professor Mowry Baden says. Wright actually conducted her studies and sculpted while

bed-ridden. Baden made house-calls to check her progress and help her with her studies. She had such determination that she often had work ready for him when he arrived. However, she missed the atmosphere of the classroom, especially the younger students and their work which so greatly inspires her.

Wright and her husband decided to journey west to Victoria 17 years ago to escape the cold climate and increasingly hectic lifestyle of Toronto. Her husband encouraged her to slow down and enjoy the finer things in life, but Wright felt restless, so she enrolled in the Visual Arts program.

"I just love painting," she says. "My father was a big influence as he used to paint as a hobby and this inspired me to go the Ontario College of Art." Wright was 18 when she met the artist Frank Carmichael, one of the Group of Seven whom she so greatly admired. "I love his work," she says with great admiration as she flips through a collection of his art.

Wright studied at the Royal Conservatory of Music in Toronto and taught piano for 20 years. Music has greatly influenced her work, Baden says. "Her art is patterned and rhythmic, and possesses a wonderful sense of scale." Although Wright's illness has affected her playing, she still likes to "dabble away on the keys" whenever she has the urge. The time of day is also passed writing poetry, another medium she uses to reflect on her life:

*The old owl in the night cried hard, cried hard
She whispered in pain in the day, out on a limb,
so far, so far
But it's only come what may
The depth of the night owl sings low, sings low
And farther and farther away, there's a cadence
offering
"Let go, Let go"
But she clings to the light of the day.*

Robyn Butler photo

In this poem, Wright chose night to symbolize old age and day to symbolize youth. Wright's philosophy of life is that it is necessary to keep alive by doing things that are enjoyable.

She has travelled extensively throughout Europe, the United States, Latin America, Bermuda, and the Canary Islands. Her walls are adorned with her colourful paintings, inspired by the sights she has seen and the adventures she has experienced. "I would like to go to Australia, but I don't suppose I'll make it there now." Perhaps she can experience Australia's adventures in her vivid imagination, and record it on canvas to treasure forever.

Singapore student helps others adapt to Canada



Hoi

BY TERESA MOORE

Ask Carol Hoi what she misses most about her native Singapore and she'll laugh.

"I'm not really homesick," says the 29-year-old Leisure Studies student who left a teaching career in Singapore to come to UVic. "I'm food sick."

Don't get her wrong: she likes Canadian food; it could just use a bit more spice.

Spicy food cravings aside, Hoi has adjusted well to Canadian life. Her energetic nature and desire to learn Canadian ways has helped her overcome the "mild culture shock" she felt when she arrived two years ago.

A good athlete, she taught physical education in Singapore for three years after completing her A levels,

our equivalent of high school. Then in 1990, the University of Singapore introduced its first degree program in physical education and served notice that physical education teachers would soon require a university degree. Hoi had the choice of attending university at home, getting a teacher's degree and returning to teaching, or branching out into something different. She chose the latter.

"I enjoyed teaching," she says, "but I felt there was a lot more for me to learn in the areas of sport management and leisure studies."

Because there were no such courses in Singapore, Hoi investigated universities in Britain, the U.S. and Canada, and after considerable thought, selected UVic because of its "excellent program in sport administration and leisure studies," the people and the weather. "The cool, mild climate was definitely a factor in my choice," she adds.

Now in the third year of the Co-op program, she has made friends, is enjoying campus life and appears to have conquered any difficulties she had when she arrived. "If I had to grade myself on how well I've fit in, I think I'd get an A+."

End of story? Not quite. Although doing well herself, but Hoi has not forgotten what it was like to be a stranger in a very, strange land.

Like many students from the Pacific Rim, Hoi speaks English fluently and was exposed to western culture before she arrived in Canada. English is the working language of Singapore and, as the country has a bilingual education system, she spoke English and Mandarin. It is also an industrialized country, in the heart of major trade routes, so she was familiar with western culture.

But, as Hoi and others from southeast Asia quickly learn, being familiar with the language and business of a strange country, does not make it any less strange. Other factors can be dramatic.

Take differences in cultural values: "At first, I was shocked by the individuality that is allowed here...that people can get divorced and remarry, and this is acceptable...that women can have children without being married. In Singapore, that's taboo. It is so different here."

Or the loneliness that a student feels when she's over 12,000 kilometers away from family and friends: "You lack friends, and there are no people for a social life. You have come here all alone, and it's a slow process to get to know people."

Hoi remembers those lonely times and sees the loneliness in others. "I think it's the hardest thing to deal with," explains the second-youngest of seven children.

To help others through this difficult transition, Hoi started *Club Singapura* in March 1992 with the help of Ng Yun Sian, Singapore's Student Advisor. Funded by the Singapore government, the Office of the Singapore Student Advisor opened in Vancouver in 1991. Since then, Ng has been travelling the country meeting many of the 1,600 Singapore students who attend Canadian universities and community colleges. She offers advice and guidance, and keeps them informed about news events and job opportunities in Singapore. She also helps them organize their own Singapore student associations.

UVic's *Club Singapura* (*Singa* means lion; *pura* means city) is a social and cultural club that brings students from seven southeast Asian countries together to share their experiences, concerns and adjustment problems. Hoi is president of the 35-member club.

"Our main objectives are to help new students adapt to life in Canada and encourage cross-cultural exchanges between Singaporeans and other nationalities," says Hoi. "We also want to teach UVic students about Singapore, so they will better understand our home, and us."

Hoi is convinced that foreign students like herself need to keep their roots in their native land, and clubs like *Club Singapura* provide a valuable link. But she also believes that to get the most out of the few years they have here, students should submerge themselves totally in their new culture, and it is this philosophy which she tries to pass on to her club-mates. With her encouragement, members have actively sought to explore Canadian culture, while retaining the important ties to their native lands. Since their first monthly meeting last March, they have held barbecues and potluck dinners, as well as hosting cultural and information nights on Southeast Asia. They have held soccer tournaments and gone white water rafting. Their next adventure is a ski trip. Hoi, herself, has taken up softball and recently purchased a pair of ice skates.

"Four and a half years is a twinkle of an eye," she muses, "and there is so much to do and learn. I don't want to miss any of it."

With Carol's help, other students won't be missing any of it either...except, perhaps, the spicy food.

For more information about Club Singapura, contact Carol Hoi at 721-0474.

Photo by Teresa Moore

Voice mail takes UVic into the future of telephone communications



Sylvia Shepherd and Dave Stothard of Computer Services are introducing voice mail to UVic. Above, they are standing in front of the charts prepared for voice mail workshops presented by Shepherd to new voice mail participants.

BY DONNA DANYLCHUK

Voice mail—now replacing busy signals on the telephones of more than 200 UVic employees—is putting smiles on the faces of its users.

"You can't take our automated system away from us at this point. It's the wave of the future. We only need to refine the system now," says Nels Granewall, manager of Financial Aid Services, which recently began using a voice mail system.

With voice mail there are no ringing phones if the voice mailbox is activated. One of the

two main features of voice mail is the creation of a personal greeting for the caller and the opportunity for the caller to leave a detailed, confidential message. The other main feature is the ability for menus to be created to provide routine information to callers or to redirect the callers to the individuals with the information they need.

Voice mail is being introduced to UVic by Dave Stothard, associate director, Computing Services, and Sylvia Shepherd, systems administrator. The new Human & Social

Development Building is completely equipped with voice mail. Other departments which are using voice mail include the President's Office, Athletic and Recreation Services, Archives and Special Collections, Library Reference & Access, Library Admin, Extension Library Services, Curriculum Lab, Co-op Education, Environmental Studies and the Centre on Aging. Many University administrators in other departments are looking at the usefulness and cost effectiveness of the system.

"Our approach is to implement it on a department by

department basis, but we will respond if we get a special request," says Shepherd. "It's more effective if everybody has it."

"Manufacturers compare voice mail to pink slips," says Stothard. "The amount of information in a voice mail message would require many packs of pink slips. Plus, we get the voice intonation in a voice mail message. So much of business can be done without two people having to talk to each other. The telephone-tag aspect can be greatly reduced."

"Voice mail is a far better economic solution for UVic [than individual answering machines]," he adds. "It is less expensive for large numbers of people and it really is more useful. It's a very powerful communication tool."

Business can be conducted from off campus by accessing the password-protected voice mail messages on one's phone and leaving detailed replies on the voice mailbox of one's phone correspondent.

When Shepherd introduces voice mail to a department, she designs the voice mail system taking the special needs of the department into account. The voice mail menu for Financial Aid Services, for example, employs automated information messages that provide callers with options to hear information by pressing touch-tone telephone buttons. Through this menu, on-campus callers are separated from off-campus callers, and UVic students are distinguished from non-UVic students. By pressing touch tone telephone buttons, callers can immediately receive information they need on bursaries, work study or students loans. Students with questions for Financial Aid can call after hours and leave their name and number with a detailed message or question. The following day, or as soon as possible, they will receive a call from a financial aid

officer with the information they need.

Says Granewall, "For years we were absolutely plagued with telephone calls from students from B.C. studying somewhere else, like McGill, who thought their student loan was coming from the University of Victoria. So, we asked Dave Stothard for a system to weed out calls that don't belong to us."

With the system developed for Financial Aid, students are asked if they have a student number and, if so, they are asked to choose a different direction on the menu. Other students are given the government loan office number.

"This has helped us tremendously to run our aid office here. In the past, lineups were partly caused by telephone calls," says Granewall. "Now we have mail boxes on our receivers which take messages and, at the end of the day, we get back to them. The other thing we like is that there's never such a thing as a busy signal. Now there's always a way to get your message through. It's almost crucial to our operation," Granewall sums up.

Installation of voice mail at UVic became a possibility when the University completed its 10-year lease of the previous SL-1 system, explains Stothard. "We purchased and upgraded it so UVic could handle the new world of digital. We also bought all the telephone cable on campus." The upgraded system, called Meridian, is a private branch exchange (PBX) manufactured by Northern Telecom.

Stothard and Shepherd say they don't think installation of voice mail at UVic will lead to loss of jobs. "It's not a tool to replace people. It's an extra tool to assist parties. Voice mail is meant to assist the caller, to give the caller a little more help," says Shepherd.

For more information about voice mail at UVic, call Sylvia Shepherd at local 7678.

Speaking out...

In addition to the speaking engagements reported in the Nov. 13 Ring, the following members of the UVic Speakers Bureau have filled speaking engagements with community groups and organizations this fall. Groups interested in arranging a speaking engagement with a speaker from the Bureau can contact the Bureau at 721-8587.

SEPT: Mr. Ian Baird, *Railways in B.C.*, Greater Victoria Hospital Society Memorial Pavilion; Dr. Robert Willihnganz, *Migraines & Overcoming Them*, Berwick House.

NOV: Prof. Cheryl Crane, *Sexual Harassment*, Kiwanis Golden K; Dr. Cary F. Goulson, *As Others See Us*, Berwick House; Mr. John McLaren, *History of Racial Discrimination*, Golden K Kiwanis; Dr. Ian MacPherson, *Settling the West*, Cubbon Adult Day Care Centre; Ms. Beverley Glover, *New Zealand*, Oak Bay Lodge; Dr. Michael Joschko, *Professional & Ethical Issues in Clinical*

Psychology, William Head Institution; Dr. Christ Garrett, *The World's Highest Tides*, Parkwood Retirement Residence; Dr. Ian MacPherson, *Settling the West*, Parkwood Retirement Residence; Ms. Beverley Glover, *New Zealand*, Cubbon Adult Day Care Centre; Dr. Bruce Monkhouse, *Stress*, Y's Men Service Club; Dr. Kathy Montgomery, *Canadian Study on Health and Aging*, Greater Victoria Hospital Society Memorial Pavilion; Dr. Jennifer Waelti-Walters, *Women's Empowerment*, Fernwood Seniors Autumn Glow Society; Dr. Andrew Farquharson, *Creative Problem Solving*, Victoria Youth Empowerment Society; Ms. Alicia Dunlop, *Coping Strategies Used by Sex Abuse Survivors*, Victoria Youth Empowerment Society; Dr. John Durkin, *Children's Friendships*, Boy Scouts of Canada; Dr. Lionel Adey, *Hymns & Christian Beliefs Down the Ages*, Parkwood Care Centre; Dr. John Anderson, *Achievement Testing*

& Examinations, Capital Families Association; Ms. Mary Jane McLachlan, *Assertion Skills*, Saanich Indian School Board; Mrs. Joanne Thomas, *Co-op Education at UVic*, Kiwanis Seniors Clubs; Ms. Marion Small, *Women in Whose Honour BC Schools Have Been Named*, Hart House Rest Home; Dr. Cary Goulson, *As Others See Us*, Kiwanis Villa; Dr. Chris Garrett, *The World's Highest Tides*, Bayside Middle School; Dr. Kathleen Berthiaume, *Northwest Coast/Coastal BC Native Culture*, Oak Bay Lodge; Ms. Kathleen Anderson, *Art & Creative Problem Solving*, Victoria Schizophrenia Society; Dr. Rick Hudson, *Ocean Instruments*, Bayside Middle School; Ms. Peggy Faulds, *Elderhostel & Seniors Programs at UVic*, Monterey Senior Centre; Ms. Sheila Sheldon-Collyer, *Higher Education Challenges*, Probus Club; Dr. James McRae, *North American FreeTrade Agreement*, The Royal Commonwealth Society.

UVic students, faculty and alumni have chance to recognize excellence in teaching

UVic alumni, students and faculty are invited to enter nominations for the 1993 Excellence in Teaching awards. The Alumni Association will present up to three awards for excellence, without regard to area. Nominees must be either regular faculty members or sessional lecturers who have completed three years of teaching duties at UVic.

Nominations will be evaluated by a nine-member Teaching Award Selection Committee that is composed equally of alumni, students and faculty, and chaired by Dr. Sam Scully, UVic Vice-President Academic and Provost.

The awards will be announced and presented at the UVic Alumni Association Annual General Meeting in May, and the recipients honoured at the Awards Recognition Ceremony the following January.

Nomination forms are available from the Alumni Office, University House 1, 3815 Haro Road. For more information contact 721-7635. Deadline for nominations is Jan. 29, 1993.

Maclean's survey better than last year's, say administrators

BY KEN FARIS

UVic's fourth-place ranking in a recent *Maclean's* university survey issue pleases some University senior administrators, while others caution that there are problems in the way the magazine interpreted the information it solicited from the 45 Canadian universities in the survey.

Vice-President Academic Sam Scully says that when it comes to students and their views on the quality of teaching, the most striking finding is that 84 per cent state that the teaching they receive is good or excellent. "This squares with my own sense of high-quality teaching at UVic."

Scully says he is pleased to see that B.C.'s three universities compare favourably with institutions across the country in the *Maclean's* survey. Simon Fraser ranked second in the comprehensive category after Waterloo, and UBC placed fourth in the medical/doctoral category after McGill, Toronto and Queen's.

Scully says, however, that the notion that the magazine's editorial staff can pick out certain things about Canada's diverse universities, and then quantify and rank them, is challengeable.

"I don't know how it could be done except by department or program, rather than by a whole list," says Scully.

Most critics of the magazine's ranking system agree that *Maclean's* did a better job this year than last. In the Nov. 9 special report on Canadian universities, the magazine divides the universities into three categories: medical/doctoral—institutions with a major commitment to PhD programs and research, all with medical schools; comprehensive—institutions offering a significant amount of research activity and a wide range of programs, including professional degrees, at the graduate and undergraduate level; and primarily undergraduate—schools which are largely focussed on undergraduate education, with a few PhD programs.

This year's approach by *Maclean's* lifted UVic from its overall ranking last year of 24th out of 46 universities, to fourth out of 12 universities in the comprehensive category.

Dr. John Schofield, Associate Vice-President Academic and the person on UVic's behalf who handled information requests from *Maclean's*, says that while this year's survey was an improvement on its predecessor, there remains shortcomings in the magazine's methodology.

"The weights attached to the different criteria were, of course, entirely subjective and arbitrary," says Schofield. "A different set of weights would have likely put us in a different place in the ranking."

Schofield adds that a number

of questions in the main questionnaire were flawed. Certain information collected by *Maclean's* was probably not fully comparable across universities, he says. "For example, there was judgment required in defining PhD equivalents in disciplines in which doctorates are not expected."

Schofield also suggests that certain of the indicators used to measure quality—for example, alumni support—may not be very reliable.

One of Schofield's biggest criticism's of this year's ranking was the inclusion of a "reputation survey," which was sent to 2,000 prominent Canadians. Reputation—the section reflecting a school's standing with its alumni, as well as within the community at large—was given a weight of 20 per cent of the final score.

"It is difficult to see how more than a few single individuals can know much about the quality or the range of programs offered at different universities, and the method probably contained a built-in bias in favour of the large and long-established institutions," says Schofield. "Furthermore, *Maclean's* did not release information on just who responded to this survey, leaving its interpretation open to question on that basis as well."

"Without the 'reputation' component, we would have doubtless finished even higher than fourth in our class, given that, along with alumni support, these were the two factors which had the greatest impact on lowering UVic's ranking."

Kayla Stevenson, Director of Development, agrees that alumni support is not a measure of a university's excellence, especially a relatively new university like UVic, which will celebrate its 30th anniversary in 1993. "It's more a reflection of the age and economic status of alumni, as well as how aggressive the institution has been in cultivating its alumni through an alumni relations program."

UVic also placed fourth this year on the list of the top 20 university libraries. University Librarian Marnie Swanson says

that while she is pleased that UVic scored so well, the library ranking suffers from the same problem as last year's *Maclean's* survey—all of Canada's universities were unfairly lumped together.

"The figures used just reflect collections size," says Swanson. "There is no measure of quality of collections or quality of service in them."

Dr. Gordana Lazarevich, Dean of Graduate Studies, thinks that *Maclean's* has found a way to sell magazines through filling a public need.

"It is obvious that *Maclean's* is providing a pop version akin to *Readers' Digest* in order to make money," says Lazarevich. "What our education system really needs is a systematic gathering of data to be interpreted by a central office—perhaps Statistics Canada—in a knowledgeable and responsible way."

Jim Griffith, Director of Student and Ancillary Services, believes that one of the best ways to enhance the University's reputation is to improve alumni relations. "If our graduates are not convinced that they have had a good experience while they were here and are not convinced that there is a reason to show loyalty to the institution after they leave, then it is very difficult to convince others to be proud of UVic."

Griffith says that accurate or not, *Maclean's* will continue to do ratings and the public will continue to read them and believe them.

"Rather than criticize the *Maclean's* article we should learn from it in a positive light," says Griffith. "The University of Victoria has great potential to be one of the leading institutions in Canada if we can implement change."

UVic President David Strong concludes that, despite the overall negative tone of the writing and the unfortunate emphasis on matters such as student sex-life and the Concordia killings, *Maclean's* magazine is providing an important service in keeping universities high on the public agenda.

Notices

Dr. Terry Morley (Political Science) has been elected Co-President of the Pacific Northwest Political Science Association at its 46th annual meeting in Portland, Oregon. Morley is the third Canadian to serve in this position: Dr. Henry Angus of UBC served from 1958-59; Dr. Edgar Efrat, formerly of UVic's Department of Political Science, served from 1971-72. **Dr. Norman Ruff** (Political Science) was elected to the executive council. The association represents faculty from Idaho, Washington, Oregon, Montana, Alaska and British Columbia. It is concerned with scholarly research, current national and international issues, and teaching materials.

Les Peake of the School of Physical Education was a keynote speaker at a recent international conference on sports science at Tartu University in Estonia.

Bob Worth, Director of Accounting Services, will become Acting Vice-President Finance on Jan. 1, 1993 until the new position of Vice-President Finance and Operations is filled in the spring of 1993. Worth will take over from Vice-President Finance Bob McQueen, who retires on Dec. 31, 1992 after 30 years of service to UVic.

Robert Dalton (Arts in Education) recently delivered a paper entitled "Voice of the Innocents: Children's Drawing as Propaganda" at the University Art Association of Canada and Native Arts Studies Association of Canada conference hosted by the Faculty of Fine Art at UVic. Dalton's paper was one of five selected for presentation in a session dealing with "Art as Propaganda." The conference attracted participants from as far afield as Latvia and Holland.

Letters

University Librarian replies to grad student's letter of concern

Dear Editor:

I appreciate the concerns expressed by Claire Heffernan in her letter published in *The Ring* on November 13th, and applaud her emphasis on the importance of the Library to the University and to the general community.

There is no question that the UVic Library, like most other academic libraries in the country, is struggling to manage with a budget which simply won't stretch far enough. Even though we receive a greater proportion of the University's budget than most other Canadian university libraries, our costs have increased so dramatically that we're no longer able to provide all the services and materials our users demand. Library staff is nevertheless working hard to develop the best solutions we can to the problems we know affect our users.

Although there's still an obvious need for more public terminals in the Library, the situation has improved somewhat in the last few months. Students, faculty, and others who have access to personal computers with modems, or to mainframe terminals, can now connect to the UVic mainframe and search VICTOR from their homes and offices. Of some help to users without remote access are the six terminals we've recently installed on the upper floors of the McPherson building.

The crowded and disorderly condition of the McPherson stacks is a major concern. We've developed a plan to provide additional shelving in the building to relieve the problem, at least in the short term. Within the next few months, more shelving will be installed on the third floor, unfortunately at the expense of some study space, but we believe improving the accessibility and condition of the collection is our highest priority. If we are able to move the Reserve operation to the main floor this summer, additional shelving will be installed on the second floor. And finally, we're hoping to gain additional space for books in the area formerly occupied by the School of Public Administration. Once these renovations are complete and the collection shifted, we believe our existing Stack Maintenance staff can keep the collection in order. In the meantime, staff members in most areas of the Library are volunteering an hour of their time a week to help tidy and shelf-read in the stacks. Improvement is already visible.

Ms. Heffernan's statement that hours have been cut in practically every department is an exaggeration. With only three exceptions, the Libraries' hours are the same as they were in 1987/88. The Interlibrary Loan Office and the Microforms unit have both had to

shorten their hours slightly in order to give staff uninterrupted time to cope with dramatically increased workloads. Requests have gone up 87 per cent in interlibrary loans and 142 per cent in microforms since 1987-88, with no increases in staff in either unit. Special Collections has had to curtail its hours since July because of a temporarily vacant position. We hope to restore that unit's hours next year.

There is no question our collections budget is inadequate to purchase all the material faculty and students demand. Nonetheless we are still able to add approximately 25,000 new volumes each year, covering a wide range of disciplines, including, I'm sure, Ms. Heffernan's. To supplement our own holdings, and as an alternative to ownership of material, we are experimenting with methods of providing quick access to material owned by other libraries. In September, we arranged with the University of Alberta to deliver items needed by UVic faculty within 48 hours of our request. We're now filling more than 60% of our requests under this arrangement. As well, we're about to launch an experiment with an online delivery service operated by the Colorado Alliance of Research Libraries. Information on this service will be sent to faculty members as soon as possible.

Another way of supplementing our collection is through donations and for many years we have encouraged faculty to donate to the Libraries a copy of any books they have authored. This type of donation becomes increasingly important as we find ourselves unable to stretch the collections budget enough to adequately satisfy teaching and research needs. Ms. Heffernan asks that faculty also donate review copies which are sent to them free of charge. While in some cases such copies may fall within our collection guidelines, we find that review copies are often textbooks and we do not normally collect textbooks. So, while we welcome donations, I think it's important to note that we only keep donations which fall within our collection guidelines.

As Ms. Heffernan points out, the Library staff is indeed working hard. They are coping with a workload which has increased dramatically in the last five years without a parallel increase in the number of staff. Automation, realigning priorities, and streamlining procedures have all helped somewhat but the fact remains that the Library, like every other unit on campus, would welcome additional funds for staff, equipment, space, and materials.

Marnie Swanson
(University Librarian).

Calendar

ALL EVENTS ARE FREE UNLESS OTHERWISE INDICATED. SUBMISSION DEADLINE FOR THE NEXT ISSUE IS DECEMBER 4.

A ATHLETICS E EXHIBITIONS F FILMS L LECTURES M MUSIC R RECREATION T THEATRE W WORKSHOPS & CONFERENCES O OTHER

Continuing

- E** Simon Charlie: Salish Carver. From the Todd Collection. To December 6. Maltwood Art Museum & Gallery. University Centre Bldg. Info 721-8298.
- O** 11 a.m. to 2:00 p.m. every Wednesday in the University Centre foyer, the SUB Green Plan Committee of the UVic Students' Society is collecting plain and coloured cardboard and plastics marked with a 1 or 2 (inside the recycling symbol) for recycling.
- O** 12:30 p.m. Muslim Prayers. Every Friday. Interfaith Chapel. Info 721-8338.
- O** 4:00 p.m. Islamic Teaching Series. Last Sunday of every month. Interfaith Chapel. Info 721-8338.

Friday, November 27

- M** 12:30 p.m. *Fridaymusic*. School of Music students. Phillip T. Young Recital Hall. Info 721-7903 (School of Music).
- O** 12:30 p.m. P.K. Page. Reading. Fine Arts Bldg. 103. Info 721-7306 (Creative Writing).
- F** 2:30 & 7:10 & 9:20 p.m. *Enchanted April* (GB, 1991) Mike Newell. \$3 matinee, \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.
- A** 6:00 p.m. *Women's Volleyball*. UVic vs. Calgary. \$2-\$5 at door. McKinnon Gym. Info 721-8725 (Athletics).
- M** 8:00 p.m. *Big Band Concert*. University Centre Auditorium. Info 721-8299.
- T** 8:00 p.m. *The Three Sisters*. Giles Hogya, Faculty Director. \$11-\$13 at Phoenix Theatre box office. Info 721-8000.
- A** 8:15 p.m. *Men's Volleyball*. UVic vs. Calgary. \$2-\$5 at door. McKinnon Gym. Info 721-8725 (Athletics).
- F** 11:15 p.m. *Death Becomes Her* (USA, 1992) Robert Zemeckis. \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.

UVic's Aerobathan will help Victoria's needy

Slim down with Santa and help a needy Victoria family enjoy a merrier Christmas.

For the 10th year, UVic's Athletics and Recreational Services will host the annual *Giving From the Heart Aerobathon*, Dec. 1 at the McKinnon Gym. This year's goal is to raise \$1,000 for the CFAX Santa Anonymous Fund to help needy Victoria families.

The two hour session, from 10:30 a.m. to 12:30 p.m. will

Saturday, November 28

- F** 2:30 & 7:10 & 9:20 p.m. *Enchanted April* (GB, 1991) Mike Newell. \$3 matinee, \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.
- A** 6:00 p.m. *Women's Volleyball*. UVic vs. Calgary. \$2-\$5 at door. McKinnon Gym. Info 721-8725 (Athletics).
- M** 8:00 p.m. *Faculty Chamber Music Series*. \$6-\$10. Phillip T. Young Recital Hall. Info 721-7903 (School of Music).
- T** 8:00 p.m. *The Three Sisters*. Giles Hogya, Faculty Director. \$11-\$13 at Phoenix Theatre box office. Info 721-8000.
- A** 8:15 p.m. *Men's Volleyball*. UVic vs. Calgary. \$2-\$5 at door. McKinnon Gym. Info 721-8725 (Athletics).
- F** 11:15 p.m. *Death Becomes Her* (USA, 1992) Robert Zemeckis. \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.

Sunday, November 29

- T** 2:00 p.m. *Charlie & The Chocolate Factory*. \$3.50 for groups of 6 or more & \$4 for others. University Centre Auditorium. Info 721-8299.
- F** 7:10 & 9:15 p.m. *Cal* (GB, 1984) Pat O'Connor. \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.

- O** 7:30 p.m. *Ended Beginnings*. Inter-denominational memorial service for those who have lost a child. Bring a candle, pen & paper. Interfaith Chapel. Info 721-8339 (Chaplain's Office).

Monday, November 30

- L** 7:30 p.m. *The Rio Summit-Success or Failure for the Pacific?* Geoffrey Palmer, Former Prime Minister of New Zealand. David & Dorothy Lam Lecture. Begbie 159. Info 721-8150 (Law).
- L** 7:30 p.m. *The Threat of the Global Corporation*. Dr. Frank Tester, UBC & Bill Fowler, Action Canada Workshop. Sponsored by World Federalists, the Public Interest

Research Group and the Voice of Women. MacLaurin A144. Info 380-6420.

- F** 7:30 p.m. *Soldier of Orange* (NDL, 1979) Paul Verhoeven. \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.

Tuesday, December 1

- M** 12:30 p.m. *Tuesdaymusic*. School of Music students perform various works. Phillip T. Young Recital Hall. Info 721-7903 (Music).
- L** 1:00 p.m. *An Explication of Women's Psychological Experience During Pregnancy*. Anita Snell, M.A. Candidate. MacLaurin A326. Info 721-7970 (Graduate Studies).
- L** 2:30 p.m. *Neural Networks as a Model for Biological Computation*. Dr. Douglas Miller, McGill University. Engineering Office Wing 230. Info 721-7209 (Computer Science).
- F** 7:10 & 9:00 p.m. *Red Sorghum* (PRC, 1987) Zhang Yimou. \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.

Wednesday, Dec. 2

- O** 12:00 p.m. *Drawing the Line show*. Kiss and Tell Collective. Multi-media presentation. SUB Theatre. Info 721-8972.
- F** 7:10 & 9:15 p.m. *The Waterdance* (USA, 1992) Michael Steinberg & Neal Jimenez. \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.
- L** 8:15 p.m. *Health Effects of Electromagnetic Fields*. Dr. Maria Stuchly, UVic. Begbie 159. Info 592-5509 (University Extension Association).

Thursday, December 3

- L** 11:30 a.m. *Artificial Hydrolytic Metalloenzyme*. Dr. Jik Chin, McGill University. Elliott 062. Info 721-7152 (Chemistry).
- M** 6:00 p.m. *Gala Victorian Christmas*. Traditional Christmas buffet dinner, Victorian songs and

recitations. Registration required. \$65.00. Faculty Club. Info 721-8003 (Phoenix Theatre).

- F** 7:10 & 9:15 p.m. *The Waterdance* (USA, 1992) Michael Steinberg & Neal Jimenez. \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.

- L** 8:00 p.m. *Artic Light*. John Dunn. University Centre Auditorium. Info 387-5822 (Royal British Columbia Museum).

Friday, December 4

- M** 12:30 p.m. *Fridaymusic*. UVic Chamber Singers. Phillip T. Young Recital Hall. Info 721-7903.
- F** 2:30 & 7:10 & 9:20 p.m. *Bob Roberts* (USA, 1992) Tim Robbins. \$3 matinee, \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.
- L** 3:00 p.m. *The Role of Cell-Adhesion Molecules in the Development of Functional Tissues*. Dr. W.J. Gallin, U. of Alberta. Cunningham 146. Info 721-7117 (Biology).

- M** 9:30 p.m. *End of Class Bash*. Jho Nek Bhone. Felicita's. Info 721-6243.

- F** 11:30 p.m. *Honeymoon in Vegas* (USA, 1992) Andrew Bergman. \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.

Saturday, December 5

- M** 12:00 p.m. *Tubaxmas*. Features UVic musicians. Donation. Market Square. Info 721-7926 (Music).
- M** 2:30 & 8:00 p.m. *UVic Chorus & Orchestra*. \$5-\$8 at School of Music & UVic Ctr. box offices. Phillip T. Young Recital Hall. Info 721-7903.

- F** 2:30 & 7:10 & 9:20 p.m. *Bob Roberts* (USA, 1992) Tim Robbins. \$3 matinee, \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.

- F** 11:30 p.m. *Honeymoon in Vegas* (USA, 1992) Andrew Bergman. \$3.75-\$5.75 at door. SUB Theatre.

Info 721-8365.

Sunday, December 6

- A** 10:30 a.m. *10th Annual Aerobathon*. Donation. McKinnon Gym. Info 721-8414 (Athletics).
- F** 7:10 & 9:20 p.m. *The Field* (GB, 1990) Jim Sheridan. \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.

Monday, December 7

- F** 7:15 & 9:10 p.m. *Hour of the Star* (Brazil, 1985) Suzana Amaral. \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.

Tuesday, December 8

- F** 7:15 & 9:10 p.m. *Ju Dou* (PRC/Japan, 1990) Zhang Yimou. \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.
- O** 7:30 p.m. Victoria Natural History Society Christmas Member's Night. Displays & Slide Presentation. Everyone welcome. Begbie 159.

Wednesday, Dec. 9

- F** 7:10 & 9:15 p.m. *Rhapsody in August* (Japan, 1991) Akira Kurosawa. \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.

- L** 7:30 p.m. Regular RASC meeting. Linzhuang Gao. Elliott 061. Info 721-3803 (Skynews).

Thursday, Dec. 10

- F** 7:10 & 9:15 p.m. *Rhapsody in August* (Japan, 1991) Akira Kurosawa. \$3.75-\$5.75 at door. SUB Theatre. Info 721-8365.

Friday, December 11

- F** 2:30 & 7:00 & 9:25 p.m. *It's a Wonderful Life* (USA, 1946) Frank Capra. \$3 matinee, \$3.75-\$5.75. at door. SUB Theatre. Info 721-8365.

Health Information Science celebrates 10th

The School of Health Information Science has planned a special afternoon and evening on Nov. 28 to mark the School's 10th year at UVic.

Health researchers, consultants and educators will join with politicians, civil servants and administrators to present six views of the future of health services in British Columbia, during an afternoon series of presentations chaired by Prof. Denis Protti, Director of UVic's School of Health Information Science.

"We've called the afternoon presentations 'Views of the Future,' as the six speakers approach health care issues based on their particular research activities and experiences," says Protti. "It promises to be a very informative and intellectually stimulating afternoon. The speakers are at the forefront of information technology and systems in health care."

The afternoon session, which is free and open to the public, gets underway at 1 p.m. in

Room A240 in UVic's new Human and Social Development Building. The session will begin with welcoming addresses by UVic President David Strong, Health Minister Elizabeth Cull, and President of the Greater Victoria Hospital Society, Ken Fyke.

The presentations will end at 4 p.m. with closing remarks by Dr. Jim McDavid, Dean of the Faculty of Human and Social Development, followed by a brief tour of the School's new facilities.

A reception and dinner will be held that evening beginning at 6:30 p.m. in the UVic Gordon Head Complex, 3964 Gordon Head Road. Tickets are \$25 each (\$10 each for students) and should be purchased by Nov. 25. To reserve tickets, please call Deborah Needley or Sherrill Berger at the School of Health Information Science, 721-8575.

Service set for grieving parents

An inter-denominational memorial service, "Ended Beginnings," for those who have ever lost a child through miscarriage, abortion, adoption, Sudden Infant Death Syndrome, accident or illness will be held at 7:30 p.m., Nov. 29 at UVic's Interfaith

Chapel.

Those attending the service are asked to bring with them a candle and a pen and paper. For further information, contact Sam Lucier, UVic Roman Catholic Chaplain, at 721-8339.

Skate with Santa

UVic's Gordon Head Complex will be the scene of a gala holiday skate Nov. 29 at from 2:00 to 3:00 p.m. All staff, faculty and students are invited to bring their skates and their families to skate with Santa. After the skate, there will be a reception in

the lounge with hot chocolate, coffee, tea and goodies and special entertainment for the children. There will also be adult games such as Trivial Pursuit and a group Pictionary challenge. Please bring your own skates.